

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **07-104050**

(43)Date of publication of application : **21.04.1995**

(51)Int.Cl. G01S 5/14
 H04B 1/06
 H04B 7/216

(21)Application number : **03-003504** (71)Applicant : **PHILIPS ELECTRON NV**
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(30)Priority

Priority number : **90 9001302** Priority date : **19.01.1990** Priority country : **GB**

(54) RADIO RECEIVER

(57)Abstract:

PURPOSE: To shorten the time necessary for getting a direct diffusion spectral signal, by comprising a pair of quadrature relationship signal generating means, a comb filtering means, and a means for non-coherently demodulating the comb filtering means to be non-diffusive.

CONSTITUTION: A satellite signal is received by an omnidirectional antenna 20, and supplied to an amplification and band filtering means 21. The output of the means 21 is inputted by a pair of mixers 24, 25. The first path of the signal of the local oscillator 22 is provided to the second input of the mixer 24, and the second path is provided to a 90 degree phase converter 23. The outputs of the mixers 24, 25 are supplied to the low-pass filters 26, 27, and the filtered signal is supplied to the A/D converters 29, 30. The digitalized in-phase signal and quadrature signal are supplied to the mixers 34, 35 with the signal of the local oscillator 32. The outputs of the mixers 34, 35 are supplied to the comb filters 36, 37. The in-phase and quadrature signals are supplied to the separate non-coherent binary phase deflection keying demodulators comprising a delay unit 40, a mixer 42 and a delay unit 41, and a mixer 43.

